

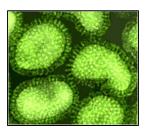
## Highly Pathogenic Avian Influenza (HPAI)



#### What is Avian Influenza?

Avian Influenza (AI), commonly called the bird flu, is a disease found among a wide variety of birds. Al viruses can infect chickens, turkeys, pheasants, quail, ducks, geese and guinea fowl, as well as a wide variety of other birds, including migratory waterfowl.

The strains that have recently been found in the U.S. have not been found to affect humans.



Influenza viruses are classified by a combination of two groups of proteins: hemagglutinin or "H" proteins, of which there are 18 (H1–

H18), and neuraminidase or "N" proteins, of which there are 11 (N1–N11). Many different combinations of "H" and "N" proteins are possible. Each combination is considered a different subtype, and can be further broken down into different strains.

Al viruses can be classified into low and high pathogenicity forms based on the severity of the illness they cause in poultry. Most strains are classified as low pathogenicity Al (LPAI) and cause mild clinical signs. In contrast, high pathogenicity Al (HPAI) causes a severe and extremely contagious disease.

Other Contact Information	
CDFA Modesto District	(209) 491-9350
CDFA Ontario District	(909) 947-4462
CDFA Redding District	(530) 225-2140
CDFA Tulare District	(559) 685-3500
CDFA Sacramento (Headquarters)	(916) 900-5002
USDA-VS Toll Free	(877) 741-3690
CDFW Wildlife Investigations Lab	(916) 358-2790

### **Clinical Signs of Al**

Clinical signs may appear as soon as 3-5 days after viral exposure. Mortality rates vary widely depending on the pathogenicity of the virus, concurrent infections and environmental stress.



Affected poultry may not show signs, but the ones that do may include any or all of the following:

- Depression
- Decreased feed and water consumption
- Decreased egg production
- Soft or misshapen eggs
- Respiratory signs (coughing and sneezing)
- Swollen heads and bluish combs
- Hemorrhages on internal organs, feet or legs
- Diarrhea
- Nervous disorders
- Sudden death

If you observe signs of illness or increased mortality, please call:

**Sick Bird Hotline** (866) 922-2473

## What about my pet birds?

Although Al infection is rare in pet birds, take the same precautions and call your veterinarian if there are any signs of illness.



#### **BIOSECURITY**

**Biosecurity** includes any practice that can reduce the risk of introducing disease to a premises. To be effective, biosecurity must be practiced diligently at all times, without exception, by everyone that comes in contact with the premises.

Highly Pathogenic Avian Influenza has been recently found in migrating waterfowl in the Pacific Flyway and associated backyard/commercial poultry flocks. It is critical for poultry owners to keep their birds from having contact with waterfowl and wild birds. Here are some tips:

- Discourage waterfowl from using ponds on your property and consider draining these if feasible
- Avoid on-farm traffic patterns that cross waterways
- Keep poultry confined in houses and/or enclose an exercise area with netting
- Avoid use of water that comes from sources where waterfowl may congregate during migration
- Producers and employees should avoid waterfowl hunting during migration; otherwise, ensure clothing, footwear, vehicles, etc. used during hunts are laundered and/or disinfected



# Other biosecurity practices that can reduce the risk of Al transmission:

- Do not share birds, equipment or feed with other bird owners
- Avoid visits to other backyard flocks or poultry operations
- Restrict access to your birds; if visitors are necessary, provide disposable coveralls, boots, and head coverings
- Isolate new birds from your other
  - birds for 30 days and observe them for signs of illness
- Scrub and remove all
  - debris from your footwear, giving particular attention to the soles, with soap and water and spray with a disinfectant
- Consider using a disinfectant foot bath with a scrub mat at the entrance to your bird area
- Thoroughly clean and disinfect (C&D) vehicles and equipment entering or leaving the premises
- Protect flocks from exposure to wild birds, rodents and insects
- Control movement associated with the disposal of mortality, litter and manure

Poultry and eggs that have been properly cooked to internal temperature of 165° F are still safe to consume. Birds from affected flocks will not enter the food system!